

REMARKS

Claims 1-4 are pending. Claim 3 has been withdrawn from consideration by the Examiner for being drawn to non-elected subject matter. Applicants respectfully submit no new matter is presented herein.

Claim Rejections – 35 U.S.C. §112, First Paragraph

Claims 1-2 and 4 are rejected under 35 U.S.C. §112, first paragraph, for reciting subject matter which was not described in the specification in a manner enabling one of ordinary skill in the art to make and/or use the invention. Applicants respectfully traverse the rejection.

In particular, the Office Action asserts Claim 1 recites the angle alpha is greater than zero but that page 11, lines 13-16 appear to teach away from such structure.

Applicants respectfully disagree with the assertion made by the Office Action.

Specifically, the Applicants respectfully submit that the written description on page 11, lines 13-16 relates to non-elected subject matter as the elected subject matter is illustrated in Figures 1A, 1B and 5-6. Furthermore, the paragraph on page 11, lines 3-16 of the specification states the shear stress in the cage column is reduced by reducing the angle alpha to zero. Moreover, the following paragraph, that is, the paragraph on page 11, lines 17-26, specifically states that the angle alpha is determined by the width of the inner joint member and that the angle alpha can easily be reduced by setting the width of the inner joint member at a large value. Yet, the same paragraph states that by simply increasing the width of the inner joint member leads to an increase in weight of the inner joint member and produces undesirable sharp edges at sections E

(Fig. 1B) and F (Fig. 2B). Therefore, the paragraph summarizes that it is important to keep the desired shape, i.e., avoid the sharp edges E and F, and still find the optimum angle alpha which will decrease the shear stress in the cage column.

Basically, the paragraphs spanning lines 3-26 on page 11 state the angle alpha cannot be zero since the weight and shape of the inner join member will be take on undesirable characteristics. Thus, the specification supports that which is claimed, that is, an angle alpha that is greater than zero as an angle alpha that equals zero will produce undesirable weight increases and produces undesirable sharp edges (E and F).

In view of the above, Applicants respectfully submit that the claims do not fail to comply with the enablement requirement and that the claims contain subject matter that is described in the originally filed specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the claimed invention.

Withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 U.S.C. §112, Second Paragraph

Claim 4 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention. Applicants respectfully traverse the rejection.

In particular, the Office Action asserts that Claim 4 further defines the angle alpha as being “not more than 10 degrees,” which suggests that in Claim 1 that angle alpha can be greater than 10 degrees.

Applicants respectfully submit that it appears as if the Office misreads or misunderstands the invention recited by Claims 1 and 4. Specifically, Applicants note Claim 1 recites the angle α is in a range greater than zero and not more than 10 degrees. Moreover, Claim 4, which depends from Claim 1, further narrows the range by reciting the angle α is in a range greater than 8 degrees and not more than 10 degrees. Thus, Claim 4 appropriately further narrows the range in which α is defined.

In view of the above, Applicants respectfully submit Claim 4 is not indefinite and withdrawal of the rejection is respectfully requested.

Claim Rejections – 35 U.S.C. §102

Claims 1-2 and 4 are rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent Number 6,120,382 to Sone et al. (Sone). Applicants respectfully traverse the rejection.

Claim 1 recites a fixed type constant velocity joint including an outer joint member having axially extending guide grooves formed in a spherical inner peripheral surface of the outer joint member; an inner joint member having axially extending guide grooves formed in a spherical outer peripheral surface of the inner joint member; torque transmitting balls disposed in corresponding ball tracks defined by the guide grooves of the outer joint member cooperating with the guide grooves of the inner joint member; and a cage holding the torque transmitting balls, wherein an angle (α) defined by a straight line connecting a contact point between the cage and the outer joint member

and a contact point between the cage and the inner joint member, and the cage center line is in a range greater than zero degrees and not more than ten degrees.

In the Response of October 11, 2005, Applicants had argued Sone fails to teach an angle defined by a straight line connecting the contact point between the cage (4) and the outer joint member (1) and the contact point between the cage (4) and the inner joint member (2), and the cage center line (0-0) being greater than zero degrees.

However, the Office Action states such an argument is not persuasive and notes that the drawings in Sone do not show the angle being greater than zero because the figures of Sone merely show the outer and inner joint members being in the aligned condition (like Figure 5 of the instant application) where the angle (α) would be zero, and that when the outer and inner joints parts are angularly displaced, the angle (α) will become greater than zero. See paragraphs 8-9 on pages 3-4 of the Office Action.

Applicants provide the following comments to the statements made in the outstanding Office Action.

The angle (α) at issue here is an angle that is derived on the basis of relative positions of the recited components at a maximum operating angle, that is, the maximum angle at which torque can be transmitted. The maximum operating angle in turn is determined by taking into account various factors, such as solid contact between the shaft and outer joint member opening, and deviation of the balls from the point of contact, any deviation of the balls from the contact ellipse, and the strength and durability at a higher operating angle. The maximum operating angle which defines the angle (α) cannot be defined simply by displacing the outer and inner joint parts shown in

the drawing figures of Sone where the maximum operating angle is not clearly defined, but is simply described as being 45 degrees or more. Applicants further note that it would not be practical to refer to the angle (α) where the maximum operations angle is not strictly defined since the maximum operating angle significantly affects the angle (α). Furthermore, it is noted that the angle (α) can exceed ten degrees, that is, it is possible for the angle (α) to be zero, and/or in a range greater than zero and not exceeding ten degrees, and/or greater than ten degrees.

Moreover, Applicants note the Office Action argues with certainty, but with no support, that when the outer and inner joint parts (1 and 2) of Sone are slightly displaced, the angle therebetween will be greater than zero yet not exceed ten degrees. Applicants respectfully note the Office Action appears to be arguing that such a structural arrangement necessarily results simply by slightly adjusting the angular relationship between the outer and inner parts.

Applicants note that it is well settled that the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish inherency of that result or characteristic. See *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). Furthermore, in relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. See *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990).

The Office Action clearly bases the assertion that it is inherent that simply by manipulating or moving one of the outer and inner joint parts (1 and 2) of Sone will necessarily result in the two parts being angularly displaced relative to each other and that such displacement must be greater than zero degrees and not exceeding ten degrees.

As noted by the Applicants above, the maximum operating angle, which defines the angle (α), cannot be defined simply by displacing the outer and inner parts relative to each other as asserted by the Office Action when the maximum operating angle is not clearly defined and is merely described as being greater than 45 degrees, as is the case in Sone. Accordingly, Applicants respectfully submit that there is absolutely nothing in the disclosure of Sone that teaches or remotely suggests that an angle greater than zero and not exceeding ten degrees would **necessarily** result simply by manipulating the outer and inner parts (1 and 2) of Sone relative to each other.

Put simply, Applicants respectfully submit that the constant velocity joint taught by Sone does not necessarily or inherently possess the structural arrangement of the invention recited by Claim 1.

To qualify as prior art under 35 U.S.C. §102, a single reference must teach, identically describe, each and every feature recited by a rejected claim. As explained above, Sone fails to disclose or suggest each and every feature recited by Claim 1. Therefore, Sone does not anticipate or render obvious the invention recited by Claim 1. As such, Applicants respectfully submit Claim 1 should be deemed allowable.

Claims 2 and 4 depend from Claim 1. It is respectfully submitted that these dependent claims be deemed allowable for the same reason(s) Claim 1 is allowable, as well as for the additional subject matter recited therein.

Withdrawal of the rejection is respectfully requested.

Conclusion

In view of the foregoing, reconsideration of the application, withdrawal of the outstanding rejections, rejoinder of Claim 3, allowance of Claims 1-4, and the prompt issuance of a Notice of Allowability are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

U. S. Patent Application Serial Number 10/774,686
Attorney Docket Number 100725-00118

In the event this paper is not considered to be timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing docket number 100725-00118.**

Respectfully submitted,
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